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Using Polarimetric Synthetic Aperture Radar Images doi: 10.3390/app7100968 93 -- Jeong-In Hwang, Sung-Ho Chae, Daeseong Kim and Hyung-Sup Jung -- Application of Artificial Neural Networks to Ship Detection from X-Band Kompsat5 Imagery doi: 10.3390/app7090961 108 -- Alessandro Piscini, Vito Romaniello, Christian Bignami and Salvatore Stramondo A New Damage Assessment Method by Means of Neural Network and Multi-Sensor -- Satellite Data doi: 10.3390/app7080781 122 Books MDPI -- Prima Riza Kadavi, Won-Jin Lee and Chang-Wook Lee Analysis of the Pyroclastic Flow Deposits of Mount Sinabung and Merapi Using Landsat -- Imagery and the Artificial Neural Networks Approach doi: 10.3390/app7090935 132 -- Soo-Kyung Kwon, Hyung-Sup Jung, Won-Kyung Baek and Daeseong Kim -- Classification of Forest Vertical Structure in South Korea from Aerial Orthophoto and Lidar Data Using an Artificial Neural Network doi: 10.3390/app7101046 146 -- Giles M. Foody Impacts of Sample Design for Validation Data on the Accuracy of Feedforward Neural -- Network Classification doi: 10.3390/app7090888-- Young-Ji Byon, Jun Su Ha, Chung-Suk Cho, Tae-Yeon Kim and Chan Yeob Yeun -- Real-Time Transportation Mode Identification Using Artificial Neural Networks Enhanced with Mode Availability Layers: A Case Study in Dubai doi: 10.3390/app7090923 174 -- Maher Ibrahim Sameen and Biswajeet Pradhan -- Severity Prediction of Traffic Accidents with Recurrent Neural Networks doi: 10.3390/app7060476 191 -- N 'adia F. Afonso and Jos 'e C. M. Pires -- Characterization of Surface Ozone Behavior at Different Regimes doi: 10.3390/app7090944 208.

Sommario/riassunto

Recently, a need has arisen for prediction techniques that can address a variety of problems by combining methods from the rapidly developing field of machine learning with geoinformation technologies such as GIS, remote sensing, and GPS. As a result, over the last few decades, one particular machine learning technology, known as artificial neural networks, has been successfully applied to a wide range of fields in science and engineering. In addition, the development of computational and spatial technologies has led to the rapid growth of geoinformatics, which specializes in the analysis of spatial information. Thus, recently, artificial neural networks have been applied to geoinformatics and have produced valuable results in the fields of geoscience, environment, natural hazards, natural resources, and engineering. Hence, this Special Issue of the journal Applied Sciences, "Application of Artificial Neural Networks in Geoinformatics," was successfully planned, and we here publish a collection of papers detailing novel contributions that are of relevance to these topics.
